

Unregulated  
Case style: DIP 8

## COMMERCIAL-INDUSTRIAL 0,25 - 1,25 Watt DC/DC Converters Series: MD8

### Electrical specifications:

Input voltage range: +/- 10%  
optional: +/- 20% (Part-No. .../W)  
Output voltage accuracy: +/- 5% \*\*  
Line Voltage regulation: +/- 1,2% / 1% of Vin typ.  
Load Voltage regulation: 3,3V output type 20% max.  
(10% to 100% full load) 5V output type 15% max.  
9V ~ 24V output types 10% max.  
Efficiency: up to 85%

\*\* Note: Measured @25°C with the condition  
of Vin = nominal and full load

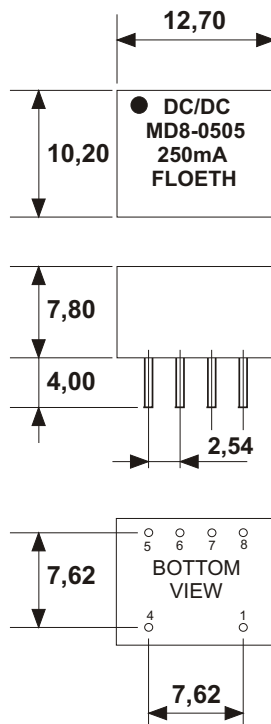
Output Ripple & Noise: 75mVp-p max.  
Short circuit protection: 1.0 second  
optional: /S = continuous  
Operating temperature: -40°C to +85°C  
Isolation voltage: min. 1000V DC  
Optional Part-No.: /H min. 2000V DC

Part-No.: /2 0,25W output power  
Part-No.: /5 0,5W output power  
Part-No.: /7 0,75W output power

CAUTION: NO INPUT POLARITY CHANGE ALLOWED!

Single Output				Dual Output			
Part-No.	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)	Part-No.	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (mA)
MD8-xx03.3	3.3, 5, 9, 12, 15, 24	3,3	378	MD8-xx03.3D	3.3, 5, 9, 12, 15, 24	+/- 3,3	+/-189
MD8-xx05	3.3, 5, 9, 12, 15, 24	5	250	MD8-xx05D	3.3, 5, 9, 12, 15, 24	+/- 5	+/-125
MD8-xx07	3.3, 5, 9, 12, 15, 24	7	180	MD8-xx07D	3.3, 5, 9, 12, 15, 24	+/- 7	+/- 90
MD8-xx09	3.3, 5, 9, 12, 15, 24	9	140	MD8-xx09D	3.3, 5, 9, 12, 15, 24	+/- 9	+/- 70
MD8-xx12	3.3, 5, 9, 12, 15, 24	12	104	MD8-xx12D	3.3, 5, 9, 12, 15, 24	+/- 12	+/- 52
MD8-xx15	3.3, 5, 9, 12, 15, 24	15	84	MD8-xx15D	3.3, 5, 9, 12, 15, 24	+/- 15	+/- 42
MD8-xx24	3.3, 5, 9, 12, 15, 24	24	52				

**Any other input or output voltages available**



PIN CONNECTION:				
PIN	SINGLE	SINGLE A	DUAL	DUAL /X
1	- IN	- IN	- IN	- IN
4	+ IN	+ IN	+ IN	+ IN
5	+ Vout	+ Vout	+ Vout	+ Vout
6	NC	NP	COM	NP
7	NP	- Vout	NP	COM
8	- Vout	NP	- Vout	- Vout

Add "A" or "/X" to the end of partnumber.  
For example MD8-0505A; MD8-1212D/X

ALL DIMENSIONS IN MM  
Tolerance +/- 0.25mm  
All pins on a 2,54mm pitch.  
Pin size is 0,5mm ( 0,020 inch ) DIA  
NC = No connection; NP = No pin  
Dot denotes +IN (pin 4)

Note: Input and output capacitor  
4,7µF - 10µF recommended.

Specification may be changed without notice  
please contact office for verification

We can offer EMC - Filter  
according to EN55011/22 Class B.

Stand: 22/17

## COMMERCIAL-INDUSTRIAL DC/DC Converters ISOLATED OUTPUTS

0,5 - 1 Watt  
 Series: MD8

Unregulated  
 Case style: DIP 8

### Electrical specifications:

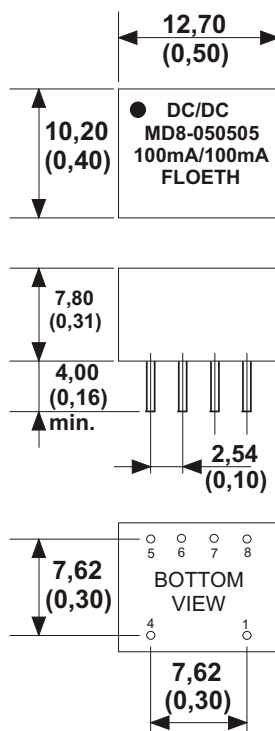
Input voltage range: +/- 10%  
 Output voltage accuracy: +/- 5% \*\*  
 Line Voltage regulation: +/- 1,2% / 1% of Vin max.  
 Load Voltage regulation: 3,3V output type 20% max.  
 (10% to 100% full load) 5V output type 15% max.  
 9V ~ 24V output types 10% max.

\*\* Note: Measured @25°C with the condition  
 of Vin = nominal and full load

Efficiency: up to 80%  
 Output Ripple & Noise: 75mVp-p max.  
 Short circuit protection: 1.0 second  
 Operating temperature: -40°C to +85°C  
 Isolation voltage I/O: min. 1000V DC  
 Isolation voltage O/O: min. 1000V DC  
 Part-No.: /H min. 2000V DC (I/O)  
 Part-No.: /5 0,5W output power

**CAUTION: NO INPUT POLARITY CHANGE ALLOWED!**

Part - No. Dual Output	Input Voltage DC	Output 1		Output 2	
		Output Voltage DC	Output Current	Output Voltage DC	Output Current
MD8-xx03,303,3	3,3V	3,3V	152mA	3,3V	152mA
MD8-xx053,3 MD8-xx0505	5V	5V	100mA	3,3V 5V	152mA 100mA
MD8-xx0509 MD8-xx0512 MD8-xx0515	12V			9V 12V 15V	56mA 41mA 33mA
MD8-xx0909	18V	9V	56mA	9V	56mA
MD8-xx1212	24V	12V	41mA	12V	41mA
MD8-xx1515	For example: MD8-03,303,303,3 1W	15V	33mA	15V	33mA



### Any other input & output voltages available

PIN CONNECTION:	
PIN	DUAL
1	GND
4	VCC
5	+ Vout 1
6	- Vout 1
7	+ Vout 2
8	- Vout 2

ALL DIMENSIONS IN MM (INCHES)  
 Tolerance +/- 0.25mm  
 All pins on a 2,54mm pitch.  
 NC = No connection; NP = No pin

**Note:** Input and output capacitor  
 4,7µF - 10µF recommended.  
 Dot denotes +IN (pin 4)

Specification may be changed without notice  
 please contact office for verification

We can offer EMC - Filter  
 according to EN55011/22 Class B.